

AMENDMENTS TO THE CLAIMS

1 1. (Currently Amended) A document-generation process performed using a
2 computer system, the process comprising:
3 parsing a raw document to create an internal representation of the document;
4 reading a first first-level transform from a transform database;
5 applying the first first-level transform to the internal representation ~~so as~~ to create
6 a first first-level document;
7 writing the first first-level document to memory;
8 reading a second first-level transform from the transform database;
9 applying the second first-level transform to the internal representation to create a
10 second first-level document;
11 receiving a first request for a second-level document that depends from the first
12 first-level document;
13 in response to the first request, reading a second-level transform from the
14 transform database;
15 in response to the first request, applying the second-level transform to the first
16 first-level document ~~so as~~ to create [[a]] the second-level document; ~~and~~
17 writing the second-level document to memory; and
18 writing the second first-level document to memory;
19 wherein the first first-level document and the second first-level document are
20 different.

1 2. (Currently Amended) A document-generation process as defined in Claim
2 1, further comprising:
3 revising the raw document;
4 applying the first first-level transform to the revised raw document ~~so as~~ to create
5 a revised first first-level document;
6 writing the revised first first-level document to memory; and
7 indicating that a then-existing second-level document is invalid.

1 3. (Original) A document-generation process as defined in Claim 2,
2 further comprising:
3 receiving a second request for the then-existing second-level document;
4 determining that the then-existing second-level document has been indicated
5 invalid;
6 applying the second-level transform to the revised first first-level document ~~so as~~
7 to create a revised second-level document; and
8 writing the revised second-level document to memory.

1 4. (Currently Amended) A document-generation process as defined in Claim
2 1, further comprising:
3 receiving a request for a revised first first-level transform;
4 revising the then-existing first first-level transform;
5 applying the revised first first-level transform to the raw document ~~so as~~ to create
6 a revised first first-level document;
7 writing the revised first first-level document to memory; and
8 indicating that the then-existing second-level document is invalid.

1 5. (Currently Amended) A document-generation process as defined in Claim
2 4, further comprising:
3 receiving a second request for the then-existing second-level document;
4 determining that the then-existing second-level document has been indicated
5 invalid;
6 applying the second-level transform to the revised first first-level document ~~so as~~
7 to create a revised second-level document; and
8 writing the revised second-level document to memory.

1 6. (Original) A document-generation process as defined in Claim 1,
2 wherein a respective GID is assigned to each of the first-level document and the second-
3 level document.

1 7. (Currently Amended) A document-generation process as defined in Claim
2 1, wherein the first first-level document and the second-level document are timestamped
3 and wherein a document is deleted when a timestamp indicates that the document is stale.

1 8. (Currently Amended) A method of generating customized versions of a
2 document using a computer system, the method comprising:
3 storing the document in raw form;
4 parsing the document to create an internal representation of the document;
5 receiving a request to generate a second-level document; ~~and~~
6 decomposing the document to create the second-level document, wherein
7 decomposing the document comprises:
8 applying a first first-level transform to the internal representation of the
9 document ~~so as~~ to create a first first-level document; ~~[[and,]] and~~
10 in response to the request to generate the second-level document, applying
11 a second-level transform to the first first-level document ~~so as~~ to
12 create the second-level document; ~~and~~
13 decomposing the document to create a second first-level document, wherein
14 decomposing the document to create the second first-level document
15 comprises:
16 applying a second first-level transform to the internal representation of the
17 document to create a second first-level document;
18 wherein the first first-level document and the second first-level document are
19 different.

1 9. (Currently Amended) A method as defined in Claim 8, wherein applying
2 a first first-level transform and applying a second-level transform comprises applying
3 sequential transforms to the document.

1 10. (Canceled)

1 11. (Canceled)

1 12. (Currently Amended) A method as defined in Claim 8, wherein
2 decomposing the document comprises applying a third-level transform to the second
3 level document ~~so as~~ to create a third-level document.

1 13. (Original) A method as defined in Claim 8, wherein the document is
2 stored in raw XML form.

1 14. (Currently Amended) A method as defined in Claim 13, wherein applying
2 a first first-level transform and applying a second-level transform comprises applying
3 sequential transforms to the document.

1 15. (Currently Amended) A method as defined in Claim 14, wherein applying
2 a first first-level transform of the document stored in raw XML form comprises applying
3 a subscription-level transform to the internal representation of the document ~~so as~~ to
4 create a subscription-level document.

1 16. (Previously Presented) A method as defined in Claim 15, wherein
2 the subscription-level transform enables content filtering of the internal representation in
3 accordance with a user's request.

1 17. (Currently Amended) A method as defined in Claim 16, wherein applying
2 a second-level transform comprises applying an organization-level transform to the
3 subscription-level document ~~so as~~ to create an organization-level document.

1 18. (Original) A method as defined in Claim 17, wherein the
2 organization-level transform enables subscription-specific content filtering of a
3 subscription-level document.

1 19. (Currently Amended) A method as defined in Claim 18, wherein
2 decomposing the document comprises applying a presentation-level transform to the
3 organization-level document ~~so as~~ to create a presentation-level document.

1 20. (Original) A method as defined in Claim 19, wherein the presentation-
2 level transform generates an organization-specific document for end user presentation.

1 21. (Original) A method as defined in Claim 20, wherein the presentation-
2 level transform generates an HTML document or a text file for end user presentation.

3 22. (Original) A method as defined in Claim 21, wherein the subscription-
4 level transform is mandatory and the organization-level and presentation-level transforms
5 are optional.

1 23. (Original) A method as defined in Claim 8, wherein a transform is
2 applied to a document only as a result of an initial demand for a transformed document.

1 24. (Original) A method as defined in Claim 23, wherein the demand for a
2 transformed document is a client request.

1 25. (Original) A method as defined in Claim 24, wherein the demand for a
2 transformed document is a document publication process.

1 26. (Original) A method as defined in Claim 23, wherein transformed
2 documents are written to a cache.

1 27. (Original) A method as defined in Claim 26, wherein demands for a
2 transformed document, subsequent to the initial demand, are referred to the cache.

1 28. (Currently Amended) A computer readable medium having data stored
2 therein to cause a data processing system to generate a data document according to a
3 process comprising:

4 storing a raw form of the document;

5 parsing the document to create an internal representation of the document; and

6 receiving a request from a client computer system coupled to the data processing
7 system to generate a second-level document into a particular form;
8 decomposing the document into the form requested by the client system, wherein
9 decomposing the document comprises:
10 applying a first first-level transform to the internal representation of the
11 document ~~so as~~ to create a first first-level document; [[and,]] and
12 in response to the request to generate the second-level document, applying
13 a second-level transform to the first first-level document ~~so as~~ to
14 create the second-level document; and
15 decomposing the document to create a second first-level document, wherein
16 decomposing the document to create the second first-level document
17 comprises:
18 applying a second first-level transform to the internal representation of the
19 document to create a second first-level document;
20 wherein the first first-level document and the second first-level document are
21 different.

1 29. (Currently Amended) A computer readable medium as defined in Claim
2 28, wherein applying a first first-level transform and applying a second-level transform
3 comprises applying sequential transforms to the document.

1 30. (Previously Presented) A computer readable medium as defined in
2 Claim 28, wherein the document is stored in XML form.

1 31. (Previously Presented) A computer readable medium as defined in
2 Claim 30, wherein the document stored in XML form is parsed by an XML parser to
3 create the internal representation.

1 32. (Previously Presented) A computer readable medium as defined in
2 Claim 31, wherein the internal representation level of the document is transformed to a
3 subscription-level document by applying a subscription-level transform to the internal
4 representation.

1 33. (Currently Amended) A computer readable medium as defined in Claim
2 32, wherein application of the subscription level transform to the internal representation
3 ~~so as~~ to create a subscription-level document is required.

1 34. (Previously Presented) A computer readable medium as defined in
2 Claim 32, wherein the subscription-level document is transformed into an organization-
3 level document by applying an organization-level transform to the subscription-level
4 document.

1 35. (Previously Presented) A computer readable medium as defined in
2 Claim 34, wherein application of the organization-level transform to the subscription-
3 level document ~~so as~~ to create an organization-level document is optional.

1 36. (Previously Presented) A computer readable medium as defined in
2 Claim 34, wherein the internal representation of the document is decomposed to a
3 transform-level document only in response to a request for a transform-level document.

1 37. (Previously Presented) A computer readable medium as defined in
2 Claim 36, wherein transformed documents are written to a cache.

1 38. (Previously Presented) A computer readable medium as defined in
2 Claim 37, wherein an initial request for a transformed document causes decomposition of
3 the internal representation into the form requested and wherein subsequent requests for a
4 transformed document causes the transformed document to be retrieved from memory.

1 39. (Previously Presented) A computer readable medium as defined in
2 Claim 29, wherein the data document is generated according to a process comprising:
3 tracking the dependencies of a transformed document; and
4 regenerating the transformed document when any dependency related to the
5 document changes.

1 40. (Previously Presented) A computer readable medium as defined in
2 Claim 39, wherein the document is generated according to a process comprising:
3 designating a cached version of the document invalid when any dependency
4 related to the document changes, and
5 regenerating the transformed document in response to a request for the document
6 that is made after the dependency change.

1 41. (Previously Presented) A computer readable medium as defined in
2 Claim 40, wherein the document is stored in XML form.

1 42. (Previously Presented) A computer readable medium as defined in
2 Claim 39, wherein the document stored in XML form is parsed by an XML parser to
3 create the internal representation.

1 43. (Previously Presented) A computer readable medium as defined in
2 Claim 42, wherein the internal representation level of the document is transformed to a
3 subscription-level document by applying a subscription-level transform to the internal
4 representation.

1 44. (Previously Presented) A computer readable medium as defined in
2 Claim 43, wherein application of the subscription level transformed to the internal
3 representation ~~so as~~ to create a subscription-level document is required.

1 45. (Previously Presented) A computer readable medium as defined in
2 Claim 43, wherein the subscription-level document is transformed into an organization-
3 level document by applying an organization-level transform to the subscription-level
4 document.

1 46. (Previously Presented) A computer readable medium as defined in
2 Claim 45, wherein application of the organization-level transform to the subscription-
3 level document ~~so as~~ to create an organization-level document is optional.

1 47. (Previously Presented) A computer readable medium as defined in
2 Claim 45, wherein the internal representation of the document is decomposed to a
3 transform-level document only in response to a request for a transform-level document.

1 48. (Previously Presented) A computer readable medium as defined in
2 Claim 47, wherein transformed documents are written to a cache.

1 49. (Canceled)

1 50. (Canceled)

1 51. (Canceled)

1 52. (Canceled)

1 53. (Currently Amended) A method of generating customized versions of a
2 document using a computer system, the method comprising:
3 storing the document in a primitive form;
4 transforming the document from primitive form into an internal representation of
5 the document;
6 transforming the internal representation into at least ~~one subscription-level~~ a first
7 first-level document ~~document([,]) and into a DEFAULT organization-level~~ second
8 first-level document ~~and into at least one user-specific organization-level~~
9 document;
10 transforming the ~~DEFAULT organization-level~~ first first-level document into at
11 least one ~~presentation-level~~ first second-level document; and
12 transforming the ~~user-specific organization-level~~ second second-level document
13 into at least one ~~presentation-level~~ second second-level document;
14 wherein the first first-level document and the second first-level document are
15 different.

1 54. (Currently Amended) A method of generating customized versions of
2 documents as defined in Claim [[53]] 71, wherein the user-specific organization-level
3 document is transformed into at least two presentation-level documents.

1 55. (Original) A method of generating customized versions of documents
2 as defined in Claim 54, wherein the user-specific organization-level document is
3 transformed into an HTML presentation-level document and into a FLAT presentation-
4 level transform.

1 56. (Currently Amended) A method of generating customized versions of a
2 document as defined in Claim [[53]] 71, wherein:

- 3 (i) the internal representation is transformed into a first subscription-level
4 document and into a second subscription-level document;
5 (ii) the first subscription level document is transformed into a subscription-level
6 specific DEFAULT organization-level document and into at least one
7 user-specific organization-level document; and
8 (iii) the second organization-level document is transformed into a subscription-
9 level-specific DEFAULT organization-level document.

1 57. (Original) A method of generating customized versions of a document
2 as defined in Claim 56, wherein the document is stored in XML form.

1 58. (Currently Amended) A system for the generation of customized data
2 documents, the system comprising:
3 first database for storing raw data documents;
4 first tabular means for storing document records;
5 an interface coupling the first database to the first tabular means;
6 a request interface to receive a document generation request, wherein the
7 document generation request indicates a particular document type;
8 a second database for storing a compilation of transforms that enable an internal
9 representation of a document to be transformed into a first first-level

document and into a second first-level document and that enable the first
first-level document to be transformed into a second-level document,
wherein each transform is mapped to a particular document type;
a document generator, coupled to the first and second databases and first and
second tabular means, and to the request interface, to generate the first
first-level first-level document using at least one of the transforms, to
generate the second first-level document using at least one of the
transforms that is different than at least one of the transforms used to
generate the first-level document, and to generate the second-level
document using at least one of the transforms in response to receipt of the
document generation request, wherein the document type of the second-
level document and the transform used to generate the second-level
document are indicated by the document generation request;
second tabular means for storing transform records; and
an interface coupling the second database to the second tabular means; and
wherein the first first-level document and the second first-level document are
different.

59. (Original) A system as defined in Claim 58, further comprising:
a cache coupled to the first tabular means and to the second tabular means.

60. (Currently Amended) A system as defined in Claim 58, wherein the
second database stores a compilation of transforms that enable:
transforming an internal representation into at least one subscription-level
document, into a DEFAULT organization-level document and into at least
one user-specific organization-level document;
transforming the DEFAULT organization-level document into at least one
presentation-level document; and
transforming the user-specific organization-level document into at least one
presentation-level document.

1 61. (Previously Presented) A system as defined in Claim 60, wherein
2 the second database stores a compilation of transforms that enable:

- 3 (i) the internal representation to be transformed into a first subscription-level
4 document and into a second subscription-level document;
5 (ii) the first subscription level document to be transformed into a subscription-
6 level specific DEFAULT organization-level document and into at least
7 one user-specific organization-level document; and
8 (iii) the second organization-level document to be transformed into a subscription-
9 level-specific DEFAULT organization-level document.

1 62. (Original) A system as defined in Claim 61, further comprising:
2 a cache coupled to the first tabular means and to the second tabular means.

1 63. (Previously Presented) A document-generation process as defined in
2 Claim 1 wherein receiving a first request for a second-level document that depends from
3 the first-level document comprises:
4 receiving a first request from a client computer coupled to the computer system
5 for a second-level document that depends from the first-level document

1 64. (Currently Amended) A document-generation process as defined in Claim
2 1 further comprising:
3 tracking the dependencies of a transformed document, wherein the transformed
4 document includes at least one ~~[[or]]~~ of the first first-level document and
5 the second-level document and the dependencies include the first first-
6 level document and the internal representation; and
7 regenerating the transformed document when any dependency related to the
8 document changes.

1 65. (Previously Presented) A method of generating customized versions of a
2 document using a computer system as defined in Claim 8 wherein receiving a request to
3 generate a second-level document comprises:

4 receiving a request from a client computer coupled to the computer system to
5 generate a second-level document.

1 66. (Currently Amended) A method of generating customized versions of a
2 document using a computer system as defined in Claim 8 further comprising:
3 tracking the dependencies of a transformed document, wherein the transformed
4 document includes at least one [[or]] of the first first-level document and
5 the second-level document and the dependencies include the first first-
6 level document and the internal representation; and
7 regenerating the second-level document when any dependency related to the
8 transformed document changes.

1 67. (Currently Amended) A method of generating customized versions of a
2 document using a computer system as defined in Claim [[53]] 71 wherein receiving a
3 request to generate a second-level document comprises:
4 receiving a request from a client computer coupled to the computer system to
5 generate [[a]] the second-level document.

1 68. (Currently Amended) A method of generating customized versions of a
2 document using a computer system as defined in Claim [[53]] 71 further comprising:
3 tracking the dependencies of the transformed documents, wherein the transformed
4 documents include the subscription-level document, the DEFAULT
5 organization-level document, the user-specific organization-level
6 document, the presentation-level documents, and the dependencies include
7 the DEFAULT organization-level document, the user-specific
8 organization-level document, and the internal representation; and
9 regenerating the second-level document when any dependency related to the
10 transformed document changes.

1 69. (Currently Amended) A method of generating customized versions of a
2 document using a computer system as defined in Claim [[53]] 71 wherein receiving a
3 request to generate a second-level document comprises:

4 receiving a request from a client computer coupled to the computer system to
5 generate [[a]] the second-level document.

1 70. (Currently Amended) A system for the generation of customized data
2 documents as defined in Claim 58 further comprising:
3 a document dependency tracker and regenerator, coupled to the first and second
4 databases and first and second tabular means, to track the dependencies of
5 a transformed document, wherein the transformed document includes at
6 least one or the first-level document and the second-level document and
7 the dependencies include the first-level document and the internal
8 representation and to regenerate the transformed document when any
9 dependency related to the document changes.

1 71. (New) A method of generating customized versions of documents as in
2 Claim 53, wherein the first-level document comprises a subscription-level document and
3 the second first-level document comprises a DEFAULT organization-level document,
4 wherein:
5 transforming the internal representation further comprises:
6 transforming the internal representation into at least one subscription-level
7 document, into a DEFAULT organization-level document and into
8 at least one user-specific organization-level document;
9 transforming the first first-level document further comprises:
10 transforming the DEFAULT organization-level document into at least one
11 presentation-level document; and
12 the method further comprises:
13 transforming the user-specific organization-level document into at least
14 one presentation-level document.

1 72. (New) A document-generation process performed using a computer
2 system, the process comprising:
3 parsing a raw document to create an internal representation of the document;
4 reading a first first-level transform from a transform database;

5 applying the first first-level transform to the internal representation to create a
6 first first-level document;
7 writing the first first-level document to memory;
8 reading a second first-level transform from the transform database;
9 applying the second first-level transform to the internal representation to create a
10 second first-level document;
11 reading a second-level transform from the transform database;
12 applying the second-level transform to the first first-level document to create a
13 second-level document;
14 writing the second-level document to memory; and
15 writing the second first-level document to memory;
16 wherein the first first-level document and the second first-level document are
17 different.

1 73. (New) A computer readable medium comprising data stored therein to
2 cause a data processing system to:
3 read a first first-level transform from a transform database;
4 apply the first first-level transform to the internal representation to create a first
5 first-level document;
6 write the first first-level document to memory;
7 read a second first-level transform from the transform database;
8 apply the second first-level transform to the internal representation to create a
9 second first-level document;
10 read a second-level transform from the transform database;
11 apply the second-level transform to the first first-level document to create a
12 second-level document;
13 write the second-level document to memory; and
14 write the second first-level document to memory;
15 wherein the first first-level document and the second first-level document are
16 different.